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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/855,169	05/14/2001	Howard M. Welch	03768/09379	8922
7590	06/18/2004		EXAMINER	
<p>Neil C. Jones Nelson Mullins Riley & Scarborough Keenan Building, Third Floor 1330 Lady Street Columbia, SC 29201</p>				AFTERGUT, JEFF H
		ART UNIT	PAPER NUMBER	1733
DATE MAILED: 06/18/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/855,169	Applicant(s) WELCH ET AL.
Examiner Jeff H. Aftergut	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 05 March 2004.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 30-52 is/are pending in the application.
4a) Of the above claim(s) 30 and 42-46 is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 31-41, 47-52 is/are rejected.
7) Claim(s) _____ is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date .
4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. ____ .
5) Notice of Informal Patent Application (PTO-152)
6) Other: ____ .

Election/Restrictions

1. Newly submitted claims 42-46 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claims 42-46 are directed to a different embodiment (species) of the claimed invention wherein only a single chill roller is utilized in the process rather than the required 2 (or 2 or more) chill rollers of the claims previously examined. As such, the invention of claim 42 is directed to a mutually exclusive species of invention. Applicant is advised that upon allowance of a generic claim, rejoinder will be considered, however currently there are no generic claims. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 42-46 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

2. Applicant's election with traverse of the election by original presentation of claims 31-41 and 47-52 in the reply filed on March 5, 2004 is acknowledged. The traversal is on the ground(s) that there is no additional search burden placed upon the examiner to examine claim 30 along with the elected invention (by original presentation). This is not found persuasive because as described on pages 13-14 of the specification, the invention of claim 30 is directed to a mutually

exclusive embodiment (species) from the invention wherein only two chill rollers are utilized which was not originally presented. As such, applicant elected (by original presentation) the invention (species) of the use of two chill rollers (and not the invention where more than two chill rollers might be present and an enclosure was associated with the chill roller arrangement). As noted above, should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

The requirement is still deemed proper and is therefore made FINAL.

3. Claims 30 and 42-46 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on March 5, 2004.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 31-34, 36-41, and 47-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Canadian Patent '575 in view of PCT WO 92/16366 and any one of Pomplun et al, Bunnelle et al or De Geest et al for the same reasons as presented in paragraph 7 of the Office action dated 10-3-03.

6. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as set forth above in paragraph 5 further taken with any one of Japanese Patent 54-82424, Wirz or Ditzler for the same reasons as presented in the Office action dated 10-3-03, paragraph 8.

Response to Arguments

7. Applicant's arguments filed March 5, 2004 have been fully considered but they are not persuasive.

The applicant argues that the claimed invention now requires the use of either a single or a pair of chill rollers and that the prior art of record failed to teach or suggest this arrangement for the chill rollers. The applicant is advised regarding the use of a single chill roller that this is clearly related to a mutually exclusive species of invention and that the use of a single chill roller only was not previously claimed. As such, applicant elected by original presentation the species of two chill rollers. The arguments presented regarding the use of only two chill rollers is essentially that: (1) the reference to Canadian Patent '575 failed to teach the use of just two chill rollers as the reference suggested that one skilled in the art would have selected four chill rollers in the process and device; (2) the references to any one of Pomplun et al, Bunnelle et al or De Geest et al, while showing two chill rollers, did not envision the mounting of the chill rollers vertically as opposed to the horizontal arrangement provided by the references and did not suggest the canted arrangement of the extruder, and; (3) the reference to PCT WO 92/16366 failed to resolve the problem relating to the use of two and only two vertically arranged chill rollers and while the reference may have shown two chill rollers, they are not vertically arranged so that the filaments flow from one to the second chill roller.

Applicant argues that there is advantages to the use of just two chill rollers in that the use of two chill rollers used to convey the continuous filaments to the bonding location may vary depending on the particular attributes desired in the final product and that dependent upon the nature of the continuous elastic filament composition, the number of layers in the final product, and the degree of elasticity required for the final product one skilled in the art might have been led to use more or less chill rollers in the arrangement. Applicant also argues that the use of two chill rollers would necessarily materially affect the fundamental character of the final product and that there was reduced machinery and operational costs, simpler design of the overall apparatus and process, and a lesser chance of filament breakage. It should be noted that there is no express evidence provided by applicant in relation to any unexpected benefit attained in the finished product or the characteristics therein as compared to the closest prior art (four chill rollers in Canadian Patent '575) and as such the conclusions drawn by applicant in relation to the improved characteristics of the finished product are taken as mere conclusions with no factual evidence present to support the same. The applicant is additionally advised that one skilled in the art would have readily appreciated (without a reference) that the reduction in the number of chill rollers utilized in the operation would have reduced the mechanical components of the operation, simplified the system and in all likelihood increased the productivity (by reducing the number of working parts one would have expected that the down time of the machinery would have been reduced). Thus, there is reason to believe that one skilled in the art at the time the invention was made would have desired to employ two chill rollers instead of four chill rollers. Additionally, there is no evidence provided by applicant of any unexpected benefit associated with the use of

two chill roller instead of four chill rollers in the operation. Applicant's arguments relating to the unexpected benefits associated with the use of just two chill rollers are therefore not persuasive.

Regarding the prior art rejection more specifically, it is agreed that the reference to Canadian Patent '575 failed to teach the use of two chill rollers. The reference also did not address the canting of the extruder, although it is believed that the same would have been canted in the operation as suggested by PCT '366. The applicant is advised that one cannot show non-obviousness by attacking references where combinations of references have been applied. Here, the question to be answered is not whether the reference to Canadian Patent '575 failed to show the claimed invention but rather would it have been obvious to one of ordinary skill in the art in light of the teachings of PCT '366 and any one of Pomplun et al, Bunnelle et al or De Geest et al to provide a canted extruder and to employ only a pair of chilling rollers in the operation of the Canadian Patent. As previously noted, the use of the canted extruder would have ensured good contact with the chill roller and increased residence time as the filaments contact the same and therefore one would have been led to cant the extruder in the manner claimed as such canted extruders were known in the art for elastic filament extrusion as suggested by PCT '366.

Additionally, there is no evidence of unexpected benefit from the use of the canted extruder in the operation. It should likewise be noted that inclusion of only two chill rollers would have been obvious in light of the teachings of Pomplun et al, Bunnelle et al or De Geest et al. More specifically each one of Pomplun et al, Bunnelle et al or De Geest et al suggested that for an extrusion (and in particular elastic extrusions) it was known to employ only two chill rollers to cool the extruded material. One skilled in the art at the time the invention was made would have understood the inherent benefits of the use of two chill rollers as opposed to the use of four chill

rollers as discussed above and would have understood that in Canadian Patent '575 there was not express benefit or necessity for the use of four chill rollers. While the reference to Pomplun et al, Bunnelle et al or De Geest et al suggested horizontally disposed chill rollers, there is no reason to believe that one skilled in the art couldn't dispose the rollers in a vertical manner and achieve the function of the rollers (cooling the extruded material). In fact, the reference to Canadian Patent '575 suggested that vertically disposing the roller would have worked well in the processing. Furthermore, one skilled in the art would have understood that the number of rollers needed to chill the material was with a common extruded material (i.e. a common extrusion temperature) a function of the speed of extrusion and the amount of contact time the material made with the chilled rollers. To go from four rollers to two at the same rate of extrusion would only require the use of rollers having a greater exterior perimeter in order to allow for adequate time for contact with the chill roller to cool the material adequately. There is no reason to believe that one skilled in the art would not have understood how to modify Canadian Patent '575 to make the processing simplified by reducing the number of chill rollers from four to two.

As noted above, the inclusion of a pair of chill rollers rather than four chill rollers would have been obvious to one of ordinary skill in the art at the time the invention was made as such would have facilitated a simplification in the overall system while achieving the same (if not increased as the downtime of the machine would have been expected to have been less) productivity. As applicant has provided no evidence of unexpected benefit for the use of two chill rollers instead of four in the vertical arrangement of Canadian Patent '575, a *prima facie* case is believed to have been made and the rejection sustained for the reasons presented above.

Conclusion

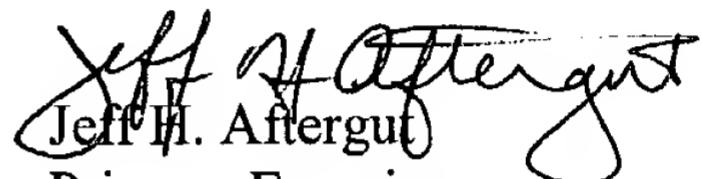
8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff H. Aftergut whose telephone number is 571-272-1212. The examiner can normally be reached on Monday-Friday 7:15-345 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jeff H. Aftergut
Primary Examiner
Art Unit 1733

JHA
June 16, 2004